



Issuance Date: August 26, 2008
Effective Date: October 1, 2008
Expiration Date: June 30, 2013
Modification Date:

#### STATE WASTE DISCHARGE PERMIT NUMBER ST 5050

## STATE OF WASHINGTON DEPARTMENT OF ECOLOGY Southwest Regional Office

In compliance with the provisions of the State of Washington Water Pollution Control Law Chapter 90.48 Revised Code of Washington, as amended, authorizes

# General Chemical Corporation 525 Castro Street Richmond, CA 94801

to discharge wastewater in accordance with the special and general conditions which follow.

Facility Location: Discharge Location:

2611 West 26<sup>th</sup> Street Extension Legal Description: Section 21, Range 1E,

Vancouver, WA 98660 Township 2N

<u>Industry Type</u>
Aluminum Sulfate Production

Latitude: 45° 38' 27" N
Longitude: 122° 41' 58" W

SIC Code: 2819

Garin Schrieve, P.E. Southwest Region Manager Water Quality Program Washington State Department of Ecology

## TABLE OF CONTENTS

SUM	MARY OF PERMIT REPORT SUBMITTALS	3
	SPECIAL CONDITIONS	
S1.	DISCHARGE LIMITATIONS	4
	A. Effluent Limitations (Outfalls 001 and 002)	
	B. Groundwater Enforcement Limitations and Early Warning Values	
	C. Unauthorized Discharges	
S2.	MONITORING REQUIREMENTS	5
	A. Wastewater Monitoring	
	B. Ground Water Monitoring	
	C. Sampling and Analytical Procedures	
	D. Flow Measurement	
	E. Laboratory Accreditation	
S3.	REPORTING AND RECORDKEEPING REQUIREMENTS	8
	A. Reporting	
	B. Records Retention	
	C. Recording of Results	
	D. Additional Monitoring by the Permittee	
	E. Noncompliance Notification	
	F. Maintaining a Copy of This Permit	
S4.	OPERATION AND MAINTENANCE	10
	A. Operations and Maintenance Manual	
	B. Bypass Procedures	
	C. Land Application	
S5.	SOLID WASTE DISPOSAL	12
	A. Solid Waste Handling	
	B. Leachate	
	C. Solid Waste Control Plan	
S6.	SPILL PLAN	13
S7.	GROUNDWATER MONITORING PLAN	14
S8.	DUTY TO REAPPLY	14
	GENERAL CONDITIONS	
G1.	SIGNATORY REQUIREMENTS	
G2.	RIGHT OF ENTRY	
G3.	PERMIT ACTIONS	
G4.	REPORTING A CAUSE FOR MODIFICATION	
G5.	PLAN REVIEW REQUIREDCOMPLIANCE WITH OTHER LAWS AND STATUTES	16
G6.		
G7.	PERMIT TRANSFER	
G8.	PAYMENT OF FEES	
G9.	PENALTIES FOR VIOLATING PERMIT CONDITIONS	17

## SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A.	Discharge Monitoring Report	Monthly	November15, 2008
S4.A.	Operations and Maintenance Manual	1/permit cycle	January 2, 2012 if no modifications have been submitted during the permit cycle
S4.A	Modified Operations and Maintenance Manual	As necessary	Within 30 days of modification
S5.C.	Solid Waste Control Plan	1/permit cycle	December 31, 2008
S5.C.	Modified Solid Waste Control Plan	As necessary	Within 30 days of modification
S6.	Spill Plan	1/permit cycle	January 2, 2012 if no modifications have been submitted this permit cycle
S6.	Modified Spill Plan	As necessary	Within 30 days of modification
S7.	Groundwater Monitoring Plan	1/permit cycle	December 31, 2008
S8.	Radioactivity Characterization Summary Report	1/permit cycle	July 31, 2009
S9.	Duty to Reapply	1/permit cycle	January 2, 2012

#### SPECIAL CONDITIONS

#### S1. DISCHARGE LIMITATIONS

All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a concentration in excess of, that authorized by this permit constitutes a violation of the terms and conditions of this permit.

#### A. Effluent Limitations (Outfalls 001 and 002)

Beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized to discharge treated sulfuric acid containment area stormwater (Outfall 001), and treated process wastewater (Outfall 002) to the infiltration/mud pond located at: Latitude: 45° 38′ 27″ N, Longitude: 122° 41′ 58″ W subject to the following limitations:

EFFLUENT LIMITATIONS			
Parameter Maximum Daily Limit <sup>a</sup>			
Outfall 001			
pH, Standard Units (s.u.)	Daily minimum is equal to or greater than 6.5 and the daily maximum is less than or equal to 8.5.		
Outfall 002			
Flow, gpd	19,800		
pH, s.u. Daily minimum is equal to or greater than 6.5 and the d maximum is less than or equal to 8.5.			

<sup>&</sup>lt;sup>a.</sup> The maximum daily effluent limitation is defined as the highest allowable daily discharge concentration. The daily discharge concentration means the average measurement of the pollutant measured during a calendar day. This does not apply to pH.

## B. Groundwater Enforcement Limitations and Early Warning Values

Treated process wastewater discharges infiltrating into groundwater may not cause or contribute to a violation of the State Groundwater Quality Standards (Chapter 173-200 Washington Administrative Code [WAC]).

The Department of Ecology (Ecology) reserves the right to revise the groundwater enforcement limitations and early warning values in the future when additional upgradient groundwater data is available. WAC 173-200 Water Quality Standards for Groundwater of the state of Washington contains an antidegradation policy which serves to prevent background groundwater quality from being degraded.

The Permittee must comply with the following groundwater quality limitations as measured in the downgradient monitoring well (MW 8B) provided below:

GROUNDWATER ENFORCEMENT LIMITATIONS AND EARLY WARNING VALUES				
Parameter	Maximum Daily Enforcement Limits <sup>a. b.</sup>	Early Warning Values b. e.		
Total Iron (mg/L)	0.3	0.15		
Total Arsenic (µg/L)	Not to exceed background, upgradient	Not to exceed background, upgradient concentrations d.		
Total Chromium (µg/L)	50	30		
Total Lead (µg/L)	50	25		
Total Mercury (µg/L)	2	1		
Sulfate (mg/L)	100	75		
TDS (mg/L)	500	325		
pH, (s.u.)	Not to be below 5.25, or greater than 8.5.	Below 5.5, or greater than 8.0		

<sup>&</sup>lt;sup>a</sup> The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day.

#### C. Unauthorized Discharges

The Permittee must take immediate action to stop and contain any unauthorized discharges. The Permittee must also clean up unauthorized discharges to the extent practical, minimize any adverse impacts to waters of the state, and correct the cause of the problem.

#### **S2.** MONITORING REQUIREMENTS

#### A. <u>Wastewater Monitoring</u>

The sampling point for Outfall 001 will be at the drain of the containment area and shall be sampled only if discharge from the containment area will be separate from Outfall 002. Outfall 002 will be at the end of pipe prior to discharging into the infiltration/mud pond.

The Permittee must monitor the wastewater according to the following schedule:

Parameter	Units	Sampling Frequency	Sample Type	
Outfall 001 – Sulfuric Acid Containment Area Stormwater <sup>a., b.</sup>				
Flow	gpd	Daily	Calculated	
рН	s.u.	Batch	Grab	

Modification Date:	

b. Two consecutive exceedances of an early warning value or an enforcement limit are required for the same parameter at the same well in order to constitute a violation.

<sup>&</sup>lt;sup>c.</sup> Upon detecting concentrations that are in excess of the following early warning values, the Permittee shall immediately follow the procedure contained in the approved Operations and Maintenance Manual as per Special Condition S4.A.4. If this situation occurs, a report shall be submitted to Ecology within 30 days of completion of the procedure.

d. Background, upgradient arsenic concentrations will be established when sufficient high quality data is gathered.

Outfall 002 – Process Wastewater/Mud			
Flow	gpd	Daily	Calculated
рН	s.u.	Batch	Grab
Total Dissolved Solids	mg/L	Monthly	Grab
Sulfate	mg/L	Monthly	Grab
Total Iron	mg/L	Quarterly <sup>c</sup>	Grab
Total Chromium d, 1	μg/L	Quarterly <sup>c</sup>	Grab
Total Arsenic d, 2	μg/L	Quarterly <sup>c</sup>	Grab
Total Lead d, 3	μg/L	Quarterly <sup>c</sup>	Grab
Total Mercury d, 4	μg/L	Quarterly <sup>c</sup>	Grab

<sup>&</sup>lt;sup>a.</sup> Monitoring required only if stormwater from the containment area is being discharged separately.

#### B. Ground Water Monitoring

The sampling points for ground water monitoring will be for the monitoring wells numbered: MW-11, MW-10, MW-9, and MW-8B.

The Permittee must monitor ground water using the same testing requirements as provided in footnote c in the testing schedule table for Wastewater Monitoring (Special Condition S2.A, above) according to the schedule provided below. Collection of well samples must occur on the same day and must represent, as much as possible, the same hydrogeological condition.

b. If discharging via Outfall 002, indicate no discharge for Outfall 001 on the discharge monitoring report.

<sup>&</sup>lt;sup>c.</sup> Quarterly is defined as January – March, April – June, July – September, and October – December.

d. The total recoverable metals fraction of the metal shall be measured. The method detection levels and quantitation levels achieved shall conform with the footnotes provided below:

 $<sup>^{1.}</sup>$  The MDL for chromium is 0.9  $\mu g/L$  using ICP-MS (scan) and method number 200.8 from 40 Code of Federal Regulations (CFR) Part 136. The quantitation level (QL) for chromium is 4.5  $\mu g/L$  (5 x MDL).

<sup>&</sup>lt;sup>2.</sup> The MDL for arsenic is  $0.4 \mu g/L$  using ICP-MS (sims) and method number 200.8 from 40 CFR Part 136. The quantitation level (QL) for arsenic is  $2.0 \mu g/L$  (5 x MDL).

<sup>&</sup>lt;sup>3.</sup> The MDL for lead is  $0.6 \mu g/L$  using ICP-MS (scan) and method number 200.8 from 40 CFR Part 136. The quantitation level (QL) for lead is  $3.0 \mu g/L$  (5 x MDL).

<sup>&</sup>lt;sup>4.</sup> The MDL for mercury is 0.2  $\mu$ g/L using ICP-MS (sims) and method number 200.8 from 40 CFR Part 136. The quantitation level (QL) for mercury is 1.0  $\mu$ g/L (5 x MDL).

Parameter	Units	Sampling Frequency	Sample Type
Water Level Feet		Quarterly	Measurement
рН	Standard Units	Quarterly	Measurement
Conductivity	Micromho/cm	Quarterly	Measurement
Redox Potentional	mv	Quarterly	Measurement
Iron (Total)	mg/L	Quarterly	Grab
Dissolved Oxygen	mg/L	Quarterly	Measurement
Sulfate	mg/L	Quarterly	Grab
Total Dissolved Solids	mg/L	Quarterly	Grab
Total Arsenic	μg/L	Quarterly	Grab
Total Chromium	μg/L	Quarterly	Grab
Total Lead	μg/L	Quarterly	Grab
Total Mercury	μg/L	Quarterly	Grab

## C. <u>Sampling and Analytical Procedures</u>

Samples and measurements taken to meet the requirements of this permit must be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Ground water sampling must conform to the latest protocols in the *Implementation Guidance for the Ground Water Quality Standards*, (Ecology 1996).

Sampling and analytical methods used to meet the water and wastewater monitoring requirements specified in this permit must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by Ecology (Department).

All soil analysis and reporting will be in accordance with *Laboratory Procedures*, Soil Testing Laboratory, Washington State University, November 1981.

## D. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices must be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration must be in conformance with manufacturer's recommendations and at a minimum

frequency of at least one calibration per year. Calibration records must be maintained for at least three years.

## E. <u>Laboratory Accreditation</u>

All monitoring data required by Ecology must be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, turbidity, conductivity, pH, and other internal process control parameters are exempt from this requirement. Conductivity and pH must be accredited if the laboratory must otherwise be registered or accredited. Soils, and hazardous waste data must be provided by a lab accredited for similar parameters in water media.

## S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee must monitor and report in accordance with the following conditions. The falsification of information submitted to Ecology constitutes a violation of the terms and conditions of this permit.

## A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results must be submitted monthly. Monitoring data obtained during the previous month must be summarized and reported on a form provided, or otherwise approved, by Ecology, and be postmarked no later than the 15th day of the month following the completed reporting period, unless otherwise specified in this permit. Priority pollutant analysis data must be submitted postmarked no later than 45 days following the reporting period. The report(s) must be sent to:

Industrial Unit Permit Coordinator Department of Ecology Southwest Region Office P.O. Box 47775 Olympia, WA 98504-7775

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge or the facility was not operating during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

Discharge Monitoring Reports must also include a copy of the laboratory reports from the analytical laboratory conducting analyses. All laboratory reports providing data for organic and metal parameters must include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/number, method detection limit (MDL), laboratory practical quantitation limit (PQL), reporting units, and concentration detected. Analytical results from samples sent to a contract laboratory must have information on the chain of custody, the analytical method, QA/QC results, and documentation of accreditation for the parameter.

#### B. Records Retention

The Permittee must retain records of all monitoring information for a minimum of three years. Such information must include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention must be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

### C. Recording of Results

For each measurement or sample taken, the Permittee must record the following information:

- (1) the date, exact place and time of sampling;
- (2) the individual who performed the sampling or measurement;
- (3) the dates the analyses were performed;
- (4) who performed the analyses;
- (5) the analytical techniques or methods used; and
- (6) the results of all analyses.

#### D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 of this permit, then the results of this monitoring must be included in calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

#### E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the permit terms and conditions due to any cause, the Permittee must:

- 1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, and correct the problem;
- 2. Immediately repeat sampling (within 48-hours) and analysis of any violation and submit the results to Ecology within 30 days after becoming aware of the violation;
- 3. Immediately notify Ecology of the failure to comply\*; and
- 4. Submit a detailed written report to Ecology within thirty days, unless requested earlier by Ecology, describing the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of the resampling, and any other pertinent information.

The spill of oil or hazardous materials **must** be reported in accordance with the instructions obtained at the following website: http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm

\* Immediately means within 24 hours for any spill, overflow, bypass from any portion of the collection or treatment system or any condition that endangers human health or the environment. For any other condition, 30 days is permissible.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

#### F. Maintaining a Copy of This Permit

A copy of this permit must be kept at the facility and be made available upon request to Ecology inspectors.

#### S4. OPERATION AND MAINTENANCE

The Permittee is at all times responsible for the proper operation and maintenance of any facilities or systems of control installed to achieve compliance with the terms and conditions of the permit.

#### A. Operations and Maintenance Manual

An Operations and Maintenance (O&M) Manual must be kept up-to-date and conform to the requirements of WAC 173-240-150. The Operation and Maintenance Manual (O&M) must be reviewed by the Permittee at least annually. Substantial changes or updates to the Operation and Maintenance Manual must be submitted to Ecology whenever they are incorporated into the manual. If no modifications to the manual have been made during this permit cycle, then the Permittee shall review and update the manual and submit it to Ecology postmarked **no later than October 31, 2009.** 

The operation and maintenance manual must contain the treatment plant process control monitoring schedule. All operators must follow the instructions and procedures of this manual. The approved Operation and Maintenance Manual must be kept available at the permitted facility.

In addition to the requirements of WAC 173-240-150(1) and (2), the manual must include:

- 1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure;
- 2. Irrigation system operational controls and procedures;
- 3. Plant maintenance procedures;
- 4. A description of steps taken to mitigate any threat to groundwater upon exceedance of early warning values contained in Condition S1.B, including sampling to confirm exceedences.

## B. <u>Bypass Procedures</u>

The Permittee must immediately notify Ecology of any spill, overflow, or bypass from any portion of the treatment system.

The bypass of wastes from any portion of the treatment system is prohibited unless one of the following conditions (1, 2, or 3) applies:

- 1. *Unavoidable Bypass* -- Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
  - If the resulting bypass from any portion of the treatment system results in noncompliance with this permit the Permittee must notify Ecology in accordance with condition S3.E "Noncompliance Notification."
- 2. Anticipated Bypass That Has The Potential to Violate Permit Limits or Conditions -- Bypass is authorized by an administrative order issued by Ecology. The Permittee must notify Ecology at least 30 days before the planned date of bypass. The notice must contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. Ecology will consider the following prior to issuing an administrative order:
  - a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of the permit.
  - b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
  - c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.
    - After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve or deny the request. The public must be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by Ecology under Revised Code of Washington (RCW) 90.48.120.
- 3. Bypass for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions -- Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of the permit, or adversely impact public health as determined by Ecology prior to the bypass.

## C. Land Application

- 1. There must be no runoff of wastewater applied to land by spray irrigation to any surface waters of the state or to any land not owned by or under control of the Permittee.
- 2. The Permittee must use recognized good practices, and all available and reasonable procedures to control odors from the land application system. When notified by Ecology, the Permittee must implement measures to reduce odors to a reasonable minimum.
- 3. The wastewater must not be applied to the irrigation lands in quantities that:
  - a. Significantly reduce or destroy the long-term infiltration rate of the soil.
  - b. Would cause long-term anaerobic conditions in the soil.
  - c. Would cause ponding of wastewater and produce objectionable odors or support insects or vectors.
  - d. Would cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the wastewater, partial decomposition products, or soil constituents that would alter ground water quality in amounts that would affect current and future beneficial uses.
- 4. The Permittee must maintain all irrigation agreements for lands not owned for the duration of the permit cycle. Any reduction in irrigation lands by termination of any irrigation agreements may result in permit modification or revocation. The Permittee must immediately inform Ecology in writing of any proposed changes to existing agreements.

#### S5. SOLID WASTE DISPOSAL

### A. Solid Waste Handling

The Permittee must handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

## B. <u>Leachate</u>

The Permittee must not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee must apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

#### C. Solid Waste Control Plan

A Solid Waste Control Plan must be developed and submitted to Ecology postmarked **no later than December 31, 2008**. The Plan must conform with the *Focus Sheet on Developing a Solid Waste Control Plan for Industrial Wastewater Discharge Permittees* (<a href="http://www.ecy.wa.gov/pubs/0710024.pdf">http://www.ecy.wa.gov/pubs/0710024.pdf</a>). Solid waste management/disposal must comply with Washington State's Solid Waste Handling Standards (WAC 173-350). This Plan must not be in conflict with local or state solid waste regulations.

The Permittee must annually review and revise the solid waste control plan, as needed. Any revisions or modifications to the solid waste control plan must be submitted to Ecology at least 30 days prior to implementation. The Permittee must comply with any plan revisions or modifications.

#### S6. SPILL PLAN

The Permittee must review the existing Spill Control Plan at least annually and update the Spill Control Plan as needed. Changes to the Plan must be sent to Ecology within 30 days of the modification. The Spill Control Plan and any supplements must be followed throughout the term of the permit. If no modifications to the Spill Control Plan have been made during this permit cycle, then the Permittee must review and update the Spill Control Plan and submit it to Ecology postmarked no later than January 2, 2012.

The Spill Control Plan must include the following:

- A description of operator training to implement the plan.
- A description of the reporting system which will be used to immediately alert facility
  managers and legal authorities (i.e. Department of Ecology and US Coast Guard) in the
  event of a spill or unpermitted discharge.
- A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills or unpermitted discharges. The use of dispersants and emulsifiers are prohibited without specific approval from the Director of Ecology.
- Address the prevention, containment, and control of spills or unplanned discharges of: 1) oil and petroleum products, 2) materials, which when spilled, or otherwise released into the environment, are designated Dangerous Waste (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070, or 3) other materials which may become pollutants or cause pollution upon reaching the waters of the State.
- Plans and manuals required by 40 CFR Part 112, contingency plans required by Chapter 173-303 WAC, or other plans required by other agencies which meet the intent of this section may be submitted.
- A list of all oil and chemicals used, processed, or stored at the facility which may be spilled into state waters.

Page 14 of 17 Permit No. ST 5050

The Plan and any supplements must be followed throughout the term of the permit. The Spill Control Plan must be kept on site and made available upon request. For the purpose of meeting this requirement, plans and manuals, or portions thereof, required by 33 CFR 154, 40 CFR 109, 40 CFR 110, 40 CFR Part 112, the Federal Oil Pollution Act of 1990, Chapter 173-181, and contingency plans required by Chapter 173-303 WAC may be submitted.

#### S7. GROUNDWATER MONITORING PLAN

The Permittee must prepare a Groundwater Monitoring Plan. The Plan must identify the locations of the monitoring wells and provide the monitoring wells' as-built construction drawings showing the elevations (with vertical datum reference point) of the wells' construction and substrata profile. The Plan must also provide site-specific guidance/procedures to collect representative data which would facilitate the assessment of any impacts from the activities conducted at the site and the application of treated process water/sludge to the infiltration/mud pond. The Plan must provide groundwater sampling and well maintenance procedures in accordance with Chapter 5 of the **Implementation Guidance for the Ground Water Quality Standards** (Ecy Pub. No. 96-02). The Permittee must submit the plan to Ecology postmarked **no later than December 31, 2008.** 

#### S8. RADIOACTIVITY CHARACTERIZATION OF OUTFALL 002 AND GROUNDWATER

The Permittee must conduct a radioactivity characterization study of the process wastewater/mud discharge from Outfall 002 and the groundwater monitoring wells: MW-11, MW-10, MW-9, and MW-8B. The Permittee must collect, at a minimum 4 samples from Outfall 002 and each of the four monitoring wells. The samples shall be analyzed for the following radioactive components:

- Gross Alpha Particle Activity (using EPA method number 900.0)
- Gross Beta Particle Activity (using EPA method number 900.0)
- Radium 226 (using EPA method number 903.1)
- Radium 228 (using EPA method number 904.0)

The samples shall be collected at a frequency of one set of samples per quarter for four consecutive quarters beginning the first quarter of 2009. A copy of the radioactive data lab reports must be submitted to Ecology along with the routine quarterly submittals of DMRs, as they become available..

Once all 4 quarters worth of data is collected, a summary report must be prepared. The summary report must provide a summary of the data, evaluate whether or not groundwater standards are achieved, and what measures will be used to reduce radioactive contamination (if necessary). The summary report must be submitted to Ecology postmarked **no later than July 31, 2010**.

#### S9. DUTY TO REAPPLY

The Permittee must apply for permit renewal postmarked no later than January 2, 2012.

#### **GENERAL CONDITIONS**

## G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to Ecology must be signed as follows:

- A. All permit applications must be signed by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - 1. The authorization is made in writing by the person described above and is submitted to Ecology at the time of authorization, and
  - 2. The authorization specifies either a named individual or any individual occupying a named position.
- C. Changes to authorization. If an authorization under paragraph B.2. above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section must make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

### **G2. RIGHT OF ENTRY**

Representatives of Ecology must have the right to enter at all reasonable times in or upon any property, public or private for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state. Reasonable times include normal business hours; hours during which production, treatment, or discharge occurs; or times when Ecology suspects a violation requiring immediate inspection. Representatives of Ecology must be allowed to have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit; to inspect any monitoring equipment or method required in the permit; and to sample the discharge, waste treatment processes, or internal waste streams.

#### **G3. PERMIT ACTIONS**

This permit is subject to modification, suspension, or termination, in whole or in part by Ecology for any of the following causes:

- A. Violation of any permit term or condition;
- B. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;
- C. A material change in quantity or type of waste disposal;
- D. A material change in the condition of the waters of the state; or
- E. Nonpayment of fees assessed pursuant to RCW 90.48.465.

Ecology may also modify this permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, including promulgation or revisions of regulations or new information.

#### **G4.** REPORTING A CAUSE FOR MODIFICATION

The Permittee must submit a new application at least 60 days before it wants to discharge more of any pollutant, a new pollutant, or more flow than allowed under this permit. The Permittee should use the State Waste Discharge Permit application, and submit required plans at the same time. Required plans include an Engineering Report, Plans and Specifications, and an Operations and Maintenance manual, (see Chapter 173-240 WAC). Ecology may waive these plan requirements for small changes, so contact Ecology if they do not appear necessary. The Permittee must obtain the written concurrence of the receiving POTW on the application before submitting it to Ecology. The Permittee must continue to comply with the existing permit until it is modified or reissued. Submitting a notice of dangerous waste discharge (to comply with Pretreatment or Dangerous Waste rules) triggers this requirement as well.

## G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications should be submitted at least 180 days prior to the planned start of construction. Facilities must be constructed and operated in accordance with the approved plans.

#### G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the permit must be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

#### G7. PERMIT TRANSFER

This permit is automatically transferred to a new owner or operator if:

- A. A written agreement between the old and new owner or operator containing a specific date for transfer of permit responsibility, coverage, and liability is submitted to Ecology;
- B. A copy of the permit is provided to the new owner and;

C. Ecology does not notify the Permittee of the need to modify the permit.

Unless this permit is automatically transferred according to section A. above, this permit may be transferred only if it is modified to identify the new Permittee and to incorporate such other requirements as determined necessary by Ecology.

## **G8. PAYMENT OF FEES**

The Permittee must submit payment of fees associated with this permit as assessed by Ecology. Ecology may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

#### **G9. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

Any person who is found guilty of willfully violating the terms and conditions of this permit is guilty of a crime, and upon conviction thereof will be punished by a fine of up to ten thousand dollars and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit incurs, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars for every such violation. Each and every such violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance is a separate and distinct violation.